

DIFFERENCES IN REASONS FOR LIVING BETWEEN ALASKA NATIVE AND
EURO-AMERICAN COLLEGE STUDENTS

A THESIS

Presented to the Faculty
of the University of Alaska Fairbanks

In Partial Fulfillment of the Requirements
for the Degree of

MASTER OF ARTS

By

Teisha Marie Simmons, B.A.

Fairbanks, Alaska

May 2003

ALASKA
HV
6545.8
S55
2003

Abstract

The purpose of this study was to explore the differences in reasons for living between Alaska Native and Euro-American college students, to determine which are important as protective factors against suicide for these two groups. A sample of 106 students at the University of Alaska Fairbanks, matched on age, sex, race, marital status, and recent suicide or suicide attempt by a family member or friend, were surveyed using a demographic instrument, the College Students Reasons for Living Inventory, and the Orthogonal Cultural Identification Scale. Results appear to indicate that Alaska Native college students report more reasons for living than Euro-American students.

Table of Contents

Signature Page	i
Title Page	ii
Abstract	iii
Table of Contents	iv
List of Tables and Figures	vi
List of Appendices	vii
Acknowledgements.....	viii
Introduction.....	1
Suicide	1
Suicide Among Alaska Natives and American Indians	1
Prevalence of Suicide Among College Students	2
Gender Differences and Suicide	3
Reasons for Living.....	5
Theory	5
College Students Reasons for Living Inventory	6
Cultural Differences in Reasons for Living Among Alaska Natives.....	6
Rationale	11
Hypotheses.....	11
Methods	13
Subjects	13
Measures	14

Procedure	16
Results.....	18
Discussion.....	27
Additional Findings	30
Limitations of this Study	30
Implications	31
Conclusion	33
References.....	34

List of Tables

Tables

1.	Demographic Data.....	14
2.	Mean and Standard Deviations for College Student Reasons for Living Inventory (CSRFLI) Total Scores and Subscale Scores	18
3.	Mean and Standard Deviations for Orthogonal Cultural Identity Scales.....	19
4.	Cronbach Alpha Internal Consistencies for the College Student Reasons for Living Inventory (CSRFLI) Total Scores and Subscale Scores and the Orthogonal Cultural Identity (OCI) Scales.....	20
5.	College Student Reasons for Living Inventory (CSRFLI) Subscale Score Intercorrelations.....	21
6.	Orthogonal Cultural Identity (OCI) Scales Score Intercorrelations.....	22
7.	Student's t-test for the Difference in College Student Reasons for Living Inventory (CSRFLI) Total and Subscale Score Group Means by Ethnicity.	23
8.	Analysis of Variance for College Student Reasons for Living Inventory (CSRFLI) Total Score.....	25
9.	Correlation of College Students Reasons for Living Inventory (CSRFLI) Total and Subscale Scores with Orthogonal Cultural Identity (OCIM) Scale Scores....	26

List of Appendices

1.	Appendix A: Demographics Survey	40
2.	Appendix B: Orthogonal Cultural Identification Scale	41
3.	Appendix C: College Student Reasons for Living Inventory	43
4.	Appendix D: UAF Institutional Review Board Consent Form.....	48
5.	Appendix E: Referral Form	50

Acknowledgements

I would like to thank my thesis advisor, James Allen, Ph. D., for the countless number of hours he spent revising, all of his guidance, and for the priceless encouragement he provided me with any time I needed it. I would also like to show my gratitude to Cecile Lardon, Ph. D. for her initial insight and guidance and for getting me started. Much appreciation to my thesis committee members - Bernice Joseph, M.B.A. and Pamela Deters, Ph. D. for all of the feedback they gave and for their flexibility in meeting times. I also express gratitude to my supervisor at work, Annette Freiburger, for always supporting me as I worked to complete this study in a timely manner. Last but not least, I would like to thank all of the UAF instructors and professors who allowed me to administer the surveys during their classes, along with their students who volunteered to take part in the study.

Introduction

Suicide, the taking of one's own life, is a major public health concern, leading to a huge loss of human potential, and is also the cause of a tremendous amount of grief for those left behind. According to the National Vital Statistics Report (Minino & Smith, 2001), 28,332 Americans took their own lives during the year 2000, which is the most recent data available. Alaska is one of the states for which suicide is proving to be epidemic. With a total of 15.5 suicides per 100,000 people in the year 2000, Alaska had the eighth highest rate of suicide in the nation (Minino & Smith, 2001). Although this was a decrease from the state's 1998 rate of 22.7 suicides per 100,000 people (Department of Health & Social Services Division of Public Health, 1998), suicide was still the sixth leading cause of death in the state. According to this report, part of the reason for the decrease was an increase in deaths of undetermined intent (4 in 1998 vs. 26 in 1999).

Suicide

Suicide Among Alaska Natives and American Indians A large part of Alaska's population (15.6%) is made up of Alaska Natives/American Indians, and there have been a disproportionate number of suicides among these groups in the State (U.S. Census Bureau, 2000). During the period from 1972-1999, suicide rates for American Indians and Alaska Natives were approximately 1.5 times the national rate (Wallace, Calhoun, Powell, O'Neil, & James, 1997).

According to the annual reports done by the Department of Health & Social Services Division of Public Health (1999), suicide has remained the sixth leading cause

of death among Alaska's Caucasian population and the fourth leading cause of death among the Alaska Native population. Although the difference in the proportion of Alaska Native/non-Native rates of suicide has decreased slightly since the 1970s, suicide is still the second leading cause of death for American Indians/Alaska Natives between the ages of 15 to 34 (Hoyert, Kochanek, & Murphy, 1999; Minino & Smith, 2001). In 1996, the Department of Health & Social Services Division of Public Health (1996) reported that Alaska Natives had a suicide rate of 48.4 suicides/100,000 people, Caucasians had a rate of 16.4 suicides/100,000 people, and those of a race falling under the classification "Other" had a rate of 10.4 suicides/100,000 people.

Prevalence of Suicide Among College Students Suicide is also the third leading cause of death among the U.S. college-aged population and several studies involving college students have suggested that suicidal ideation is common among this population (Barrios, Everett, Simon, & Brener, 2000; Brener, Hassan, & Barrios, 1999; Furr, Westefeld, McConnell, & Jenkins 2001). Though a decrease from the early 1980s, when suicide was the second leading cause of death for college students (Silver, Goldstein, & Silver, 1984), it is still extremely high-ranking. In their 1999 study, Brener, Hassan, & Barrios found that approximately 10% of students reported seriously considering a suicide attempt, 7% made a suicide plan, 2% attempted suicide at least once, and 0.4% made a suicide attempt that required medical attention. In addition, estimates of suicidal behaviors in large-sample student surveys have ranged from 32% to 43% for suicidal thoughts and 4% to 15% for actual suicide attempts (Westefeld, Whitchard, & Range, 1990). Although these data possess significant limitations and do not give definite estimates of the incidence and

prevalence of suicidal ideation and attempts, they do suggest that a considerable number of college students are engaging in suicidal behaviors, and highlight the need for more focused research in this area.

Although there has been considerable research examining the prevalence of suicide rates among college students, it is often extremely difficult to obtain accurate data from large, diverse student samples (Schwartz, 1980). Data collected by the director of the counseling center at the University of Alaska Fairbanks reports that the counselors encountered 21 cases during the 2000 calendar year in which the client displayed suicidal ideation or intent (Fellerath, 2001). However, because it is likely that many of the counselors may have labeled the case as a mood disorder rather than a case of suicidal ideation/intent, this number may be lower than the actual total. In addition, how the total number of suicidal ideation/intent cases differs among the different ethnic groups is not known.

Gender Differences & Suicide

Suicide rates also differ greatly between men and women. In most countries, including the United States, rates of suicide are higher among the male population than that of the female population (Hawton, 2000). According to the Department of Health & Social Services Division of Public Health (1999), Alaska males (26.3 per 100,000) were about three times more likely than females (8.3 per 100,000) to commit suicide. This difference in rates suggests that there could be a difference in the risk and protective factors between the two genders. This gender difference is also significant among the American Indian population. The male to female ratio of completed suicides among the

American Indian population is 12:1, while the overall U.S. ratio is only 3.3:1 (Range, et al., 1999). In addition, American Indian males tend to choose particularly lethal methods to commit suicide, with 55.5% of American Indian males using firearms and 40 percent using hanging (Range, et al., 1999). Although there is extensive research which suggests that there are significant differences in the rates of suicidal ideation between the genders in various age and race groups, research has not supported this trend in college populations (Langhinrichsen-Rohling., Sanders, Crane, Monson, & Candace, 1998; Rich, Kirkpatrick-Smith, Bonner, & Jans, 1992).

Reasons for Living

Theory

While most suicidology research has focused on the identification of maladaptive characteristics and risk factors of suicidal individuals, Linehan, Goodstein, Nielsen, & Chiles (1983) have taken a unique perspective that examines whether non-suicidal persons hold a set of unique beliefs and expectations different from those of suicidal individuals. Rather than focusing on the factors that put a person at risk for suicide, the focus of the perspective is on protective factors. Linehan, Goodstein, Nielsen, & Chiles (1983) have proposed that suicidal ideators, or people who are contemplating taking their lives, lack certain positive or adaptive characteristics, such as reasons for living, which allow most people to cope with stressful life-events. To study this, Linehan and colleagues developed the Reasons for Living Scale (RFL; Linehan, Goodstein, Nielsen, & Chiles, 1983). The RFL theory is grounded in cognitive and cognitive-behavioral approaches to suicidal behavior and is focused on identifying the "adaptive, life-maintaining characteristics of non-suicidal people" (Linehan, Goodstein, Nielsen, & Chiles, 1983, p. 276). According to cognitive theory, thoughts, feelings, and behaviors are closely interrelated, and during psychological distress, thinking becomes distorted, which in turn affects feelings and behaviors. Individuals often let these rigid and biased errors in logic, called cognitive distortions, negatively influence their perceptions, leading to faulty conclusions such as their belief that suicide is the only way to cope (Clark & Beck, 1999). Examining it from a cognitive perspective, Reineckie (1997, p. 86)

describes suicidality as “stemming from distorted or maladaptive mental representations and thought processes that are learned at an earlier point in time.”

Using the RFL Scale, Neyra, Range, and Goggin (1990) studied a group of college students to see if suicide ideators responded differently than non-ideators after success or failure experiences. While the authors did not find any main effects for success or failure, they did find that low suicidal ideation subjects were significantly higher than high suicidal ideation subjects in overall reasons for living. Similarly, Hirsch and Ellis (1996), in their study of the relationship between life stress and reasons for living among college students, found that suicidal ideators had a significantly lower RFL score than non-ideators. In addition, they also found a gender effect wherein women in the study scored higher than men on their total RFL score and on several subscales.

College Students Reasons for Living Inventory

In 1992, Westefeld, Cardin, & Deaton speculated that, given the developmental characteristics of traditional college students and the unique goals and stressors related to college attendance, there are protective reasons for living specific to college students. Out of this research, the College Students Reasons for Living Inventory (CSRFLI) was developed. The six subscales of the CSRFLI are Survival and Coping Beliefs (SCB), College and Future-Related Concerns (CFRC), Moral Objections (MO), Responsibility to Friends and Family (RFF), Fear of Suicide (FS), and Fear of Social Disapproval (FSD).

Cultural Differences in Reasons for Living Among Alaska Natives

There has been extensive research regarding the high rate of suicide among the American Indian and Alaska Native population. Alaska's Native population can be

broadly broken down into seven different groups—Inupiaq, Yupik, Athabaskan, Tlingit, Haida, Tsimshian, and Aleut/Alutiq (Langdon, 1993). These seven groups can be further broken down into numerous subgroups, which each have their own unique beliefs, customs, practices, and social structure.

Novins, Beals, Roberts, & Manson (1999) studied three culturally distinct American Indian tribes for differences in factors associated with suicidal ideation. They found no single correlate of suicidal ideation common to all three tribes. Instead, correlates of suicidal ideation were consistent with each tribe's social structure, conceptualization of individual and gender roles, support systems, and conceptualization of death. Numerous other studies have also suggested an extreme variation in suicide rates from one tribe to the next as the result of different cultures and social situations (McIntosh, 1983; May, 1987; Spaulding, 1985; Range, et al., 1999). While there has not been any research done to assess the factors related to each of Alaska's specific Native groups, there are differences in the suicide rates among various Alaska Native regions. For example, in 1998, there were eleven Alaska Native suicides in the Bethel, zero in Sitka, seven in Nome, and seven in the Yukon-Koyukuk region. This has important implications for potential differences among the distinct Native cultural groups in Alaska regarding suicide.

Various other factors have also been associated with the presence of suicidal ideation in Alaska Natives and American Indians. These factors include having a family member or friend who attempted or committed suicide in the past six months, alcohol and other substance use, and psychiatric symptomatology (Novins, Beals, Roberts, &

Manson, 1999). This study also identified strong associations between psychiatric symptomatology, depression, and suicidal ideation among both Native- and non-Native American groups. Several studies have concluded that those Alaska Natives who have attempted or committed suicide are more likely than age- and sex-matched controls to have a history of alcohol abuse (Kettl & Bixler, 1991; Dinges & Duong-Tran, 1992). Kettl and Bixler (1991) reported that, since the late 1980s, the percentage of suicides that are alcohol-related in Alaska has been almost twice that of the national average and that the percentage is significantly higher among Alaska Natives than among non-Natives. While there is much research suggesting a strong link between alcohol abuse and suicide, there are many theories that state that, like suicide, alcohol abuse is only a symptom of a larger problem. Durkheim (1951) theorized that anything that weakens the social link that holds an individual to his or her community will serve to increase suicidal risk, whereas anything that strengthens those links will serve to decrease the risk. Similarly, numerous theorists regard the high rate of suicide among Alaska Natives as a symptom of the sociocultural oppression that they have faced since the arrival of the European American missionaries, traders, and teachers in the early 19th century (Sullivan & Brems, 1997; Thompson & Walker, 1990; Kettl & Bixler, 1991; Napoleon, 1991). According to this theory, committing suicide is the means by which many Alaska Natives deal with their loss of culture and accompanying lack of self-identity and their ascribed roles in the community.

Suicide among Alaska Natives and college students is a significant problem. In contrast to majority U.S. cultures, Alaska Natives have a strong collectivistic lifestyle and

close-knit extended families are very common. Alaska Native peoples often have a deep connection to, not only their families, but also their home communities. This collectivistic orientation could have significant influence on the differences in the reasons for living between Alaska Native college students and non-Native college students.

The CSRFLI is a measure developed to tap dimensions of attitudes and beliefs among college students that have been identified as important by the Reasons for Living Theory. The scale has been shown to be effective in measuring the strength of the attitudes and beliefs that college students have in regard to suicide, and to what extent people present with suicidal ideation. The cultural beliefs, attitudes, and values of Alaska Natives differ greatly from those of Euro-Americans (Henry, 2002), and thus it is likely that the reasons for living and accompanying protective factors will also differ. For example, the Responsibility to Family & Friends (RFF) subscale of the CSRFLI consists of eight items concerning missing family and friends in the event of suicide, not wanting to cause them guilt or pain, and being committed to responsibilities to them. The Fear of Social Disapproval (FSD) subscale consists of five items that reflect concerns about showing a lack of strength and character, causing embarrassment, and leaving others with negative memories of oneself. It may be likely that the Alaska Native students will score higher on these scales than their non-Native counterparts. In addition, the Euro-American college students, who come largely from cultural groups more characterized by individualistic orientations to self (Henry, 2002), could likely score higher on the College and Future Related Concerns (CFRC) subscale that is made up of ten items addressing

areas such as benefiting from past work, being a successful member of society, and other hopes and plans for the future.

Rationale

As noted above, Alaska Natives are at a heightened risk for suicide in comparison with non-Native populations. Recent research done by Borowsky, Resnick, Ireland, and Blum (1999) points to strength-based approaches that study protective factors as having more to contribute in the prevention of suicide than does the reduction of risk factors. In addition, Middlebrook, LeMaster, Beals, Novins, and Manson (2001), in a review of suicide prevention programs, note a crucial first step in the development of such programs is to have a well-defined, documented description of the target population's protective factors.

Although over 25% of the University of Alaska Fairbanks student population are Alaska Native or American Indian (University of Alaska Fairbanks Office of Planning Analysis and Institutional Research, 2001), and this group displays heightened risk for suicide, no research has been done to study the prevalence of suicidal ideation at UAF or the protective reasons for living that Alaska Native college students use. The study of protective factors that may help prevent suicide and lessen suicidal thoughts and behaviors among Alaska Native college students is an important and unaddressed concern. The purpose of this investigation was to assess any potential differences in reasons for living among Alaska Native and non-Native, Euro-American college students.

Hypotheses

1. Alaska Native students will have lower CSRFLI total scores than Euro-American students.

2. There will be significant differences in the reasons for living between the Alaska Native and Euro-American students. Specifically:
 - a. Alaska Native students will score higher than Euro-American students on the RFF subscale;
 - b. Alaska Native students will score higher than Euro-American students on the FSD subscale;
 - c. Alaska Native students will score lower than Euro-American students on the CFRC subscale.
3. Female students across ethnicity will have higher CSRFLI total scores than male students.
4. Male Alaska Native participants will have lower CSRFLI total scores than Euro-American men, Euro-American women, and Alaska Native women.

Methods

Subjects

Subjects participating in this study consisted of 251 undergraduates enrolled at the University of Alaska Fairbanks. All subjects were volunteers recruited from their regularly scheduled classes. A matching process was used in which a Euro-American subject was matched for each Alaska Native subject on the following variables: gender, age category, having a family member or friend who recently attempted or committed suicide, and marital status. In this matching process, three Alaska Native participants were eliminated because no Euro-American participants matched on all variables. The matched sample consisted of a total of 53 students, 19 % male and 81% female. The mean age of the overall matched sample was 24.86 years. The mean age of the matched Euro-American participants was 25.59 years, while the mean age of the matched Alaska Native participants was 24.12 years. In both groups, 44 of the participants were single while 9 were married, and 16 participants in each group reported that someone close to them had either attempted or committed suicide in the last year. Eighteen of the Alaska Native participants and 11 of the Euro-American stated that they have children. Table 1 provides demographic data for the entire Euro-American and for the matched European-American and Alaska Native samples, and further description of the matching results

Table 1

Demographic Data

	Initial Euro-American						Matched Euro-American						Matched Alaska-Native					
	Male			Female			Male			Female			Male			Female		
	M	SD	n	M	SD	n	M	SD	n	M	SD	n	M	SD	n	M	SD	n
Age	23.37	8.92	42	22.94	7.03	115	28.30	13.51	10	22.88	6.59	43	23.40	6.10	10	24.84	8.57	43
Age Category																		
< 21	18.92	0.74	26	18.74	0.83	58	19.20	0.45	5	18.68	0.89	19	19.20	1.10	5	18.84	0.76	19
21+	31.07	11.23	15	27.21	7.94	57	37.40	14.26	5	26.21	7.26	24	27.60	6.19	5	29.58	8.97	24
Not Reported			1															
Class Standing																		
Year 2 AA						2						1						1
Freshman			21			53			6			20			3			14
Sophomore			10			21			2			4			2			10
Junior			7			22			1			10			3			4
Senior			3			11			1			5			2			9
Other			1			6						3						5
Marital Status																		
Single			39			83			9			35			9			35
Married			3			32			1			8			1			8
Number of Children	0.24	0.82	42	0.43	0.88	115	0.70	1.49	10	0.42	0.88	43	0.30	0.95	10	0.91	1.39	43
Children Category																		
No Children			38			90			8			34			9			26
1+ Children	2.50	1.29	4	1.96	0.73	25	3.50	0.71	2	2.00	0.71	9	3.00	0.00	1	2.29	1.31	17
Home																		
Urban			37			110			9			39			5			18
Rural			5			5			1			4			5			25
Suicide Attempt																		
No			36			88			8			29			8			29
Yes			6			17			2			14			2			14

Measures

Subjects completed a demographic questionnaire (see Appendix A) that asked them to identify their age, sex, marital status, family income, recent family history of suicide, and ethnicity, including tribal membership.

Subjects also completed the Orthogonal Cultural Identification Scale (see Appendix B), which is a six-item scale and measures how an individual culturally identifies himself/herself. With a Cronbach's *alpha* ranging from .80 to .87, the scale has good internal consistency. In addition, in validity work with the instrument, the correlation of the American Indian Identification scale with other variables associated with identity ranged from .39 to .74. (Oetting & Beauvais, 1990).

The College Students Reasons for Living Inventory (CSRFLI) was also administered (see Appendix C). The CSRFLI is a self-report survey that measures the reasons why someone would decide to continue to live, even if they were contemplating suicide (Westefeld, Cardin, & Deaton, 1992). The CSRFLI is made up of 46 items, which form six subscales, and each item appears on only one subscale. The survey requires respondents to rate each item ranging from 1 (not at all important) to 6 (extremely important), in terms of how important that reason would be to not kill oneself, if the person was to think about committing suicide. Higher scores represent stronger reasons for living and thus lower suicidal risk. The scale is effective in measuring the strength of the attitudes and beliefs that college students have with regard to suicide, and to what extent people present with suicidal ideation.

The RFL scale, on which the CSRFLI is based, is a useful instrument to compare potential ethnic differences in reasons people report for choosing not to kill themselves, because it does not require respondents to self-disclose if they have suicidal ideation (Morrison & Downey, 2000). In two separate studies, reported in Westefeld, Cardin, & Deaton (1992), which resulted in the development of the CSRFLI, the coefficient *alpha* estimates for the instrument subscales were reported to range from .64 to .86 in study 1, and from .45 to .81 in study 2. A six-factor solution accounted for 43 to 48% of the variance in these studies, providing support for the CSRFLI six-subscale structure. Rogers and Hanlon (1996) used confirmatory factor analysis to cross-validate this finding in a sample of 511 undergraduates. In this analysis, goodness of fit indices did not provide adequate support for the six-factor model. However, a follow-up exploratory

factor analysis found a six-factor solution with considerable, but not complete, item overlap which accounted for 45% of the variance, providing tentative support for the scale's continued use and development.

In a study done by Scheel (1999) to verify the reliability and validity of the CSRFLI with Native American college students, 275 American Indian college students were assessed using the CSRFLI, the Suicide Risk Questionnaire (SRQ; Westefeld, Cardin, & Deaton, 1992), the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977), the Beck Depression Inventory (BDI; Beck, Kovac, & Weissman, 1977), and a Cultural Orientation and Demographic Questionnaire developed for the study. In this study, Cronbach *alpha* coefficients for subscales ranged from .69 to .92. Results found a relation of the CSRLI scores with CES-D and BDI scores, and that CSRLI scores differed by suicide risk category on the SRQ, providing evidence of convergent validity. In this sample, CSRFLI total scores or subscale scores did not differ as a function of membership in one of four cultural orientation statuses, as assigned by scores derived from the Cultural Orientation and Demographic Questionnaire (American Indian identified, bicultural, marginalized, White identified).

Procedure

Participants were initially recruited from core classes because they are the courses that all undergraduates are required to take. Due to the disproportionate number of non-Native students to Native students in the core classes, specific courses in the Alaska Native Studies Department were also targeted in order to get a minimum of 50 surveys filled out by Alaska Native students. At a time specified by the instructors, the researcher

went into each classroom and explained what the risks and benefits of the study were, that participation in the study was completely voluntary, that non-participation would not result in any penalty, and that they were free to withdraw from the study at any time. The researcher also described the procedures that would guarantee their anonymity, and how the confidentiality of their answers would be ensured. Participants who chose to stay and participate completed a standard informed consent form (see Appendix D) and were then given a packet of materials containing the demographic questionnaire, the Orthogonal Cultural Identification Scale, and the College Students Reasons for Living Inventory. Participants also received a referral sheet (see Appendix E) with a list of emergency contact and counseling services phone numbers, in the unlikely event that a participant became upset while answering the CSRFLI items.

Results

All data presented are from the matched subject sample of Alaska Natives and European-Americans. Means and standard deviations are presented for the six CSRFLI subscales for the matched subset of Alaska Native females, Alaska Native males, Euro-American females, and Euro-American males in Table 2, and means and standard deviations are presented for the Orthogonal Cultural Identity scale in Table 3.

Table 2

Mean and Standard Deviations for College Student Reasons for Living Inventory (CSRFLI) Total Scores and Subscale Scores

	Matched Euro-American						Matched Alaska-Native					
	Male			Female			Male			Female		
	M	SD	n	M	SD	n	M	SD	n	M	SD	n
CSRFLI Total Score	180.90	34.35	10	181.86	30.82	43	188.80	51.46	10	197.00	29.90	43
CSRFLI Subscale 1: Survival and Coping Beliefs	47.10	12.74	10	46.51	8.69	43	48.00	11.98	10	48.37	8.93	43
CSRFLI Subscale 2: College and Future-Related Concerns	44.50	9.19	10	41.00	9.82	43	42.30	12.18	10	45.00	10.64	43
CSRFLI Subscale 3: Moral Objections	20.10	10.12	10	22.21	9.54	43	24.80	7.48	10	25.65	7.32	43
CSRFLI Subscale 4: Responsibility to Friends and Family	34.90	9.60	10	35.40	8.27	43	38.70	11.01	10	39.47	7.04	43
CSRFLI Subscale 5: Fear of Suicide	17.40	5.46	10	21.56	6.32	43	18.90	8.06	10	21.28	6.86	43
CSRFLI Subscale 6: Fear of Social Disapproval	16.90	5.47	10	15.19	3.98	43	16.10	7.61	10	17.23	4.52	43

Table 3

Mean and Standard Deviations for Orthogonal Cultural Identity Scales

	Matched Euro-American						Matched Alaska-Native					
	Male			Female			Male			Female		
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>
Anglo Scale	3.53	0.46	10	3.47	0.62	43	3.06	0.87	10	2.91	1.04	43
American-Indian Scale	1.47	0.79	10	1.28	0.45	43	2.86	0.77	10	3.10	0.77	43

Cronbach's *alpha* were computed for each CSRFLI subscale by ethnicity to provide an estimate of internal consistency for each subscale and are presented in Table 4, and scale intercorrelations for the six CSRFLI subscales are computed and presented in a correlation matrix in Table 5. Internal consistency was adequate to excellent for the CSRFLI. Values ranged from .95 to .61 with the exception of subscale 6 for Euro-American women, which was .45. Scale intercorrelations were low, ranging from .04 to .48, with the exception of subscale 2, College and Future-Related Concerns, which correlated with subscale 1, Survival and Coping Beliefs, at the level of .69. This is consistent with other findings in the literature with this particular subscale (Westefeld, Cardin, & Deaton, 1992; Scheel 1999). In sum, each subscale, with the possible exception of subscales 1 and 2, appears to be measuring independent psychological constructs, reflecting how people group and map their thinking on suicide and reasons for living.

Table 4

Cronbach Alpha Internal Consistencies for the College Student Reasons for Living Inventory (CSRFLI) Total Scores and Subscale Scores and the Orthogonal Cultural Identity (OCI) Scales

	<u>Matched Euro-American</u>		<u>Matched Alaska-Native</u>		<u>Matched</u>	<u>Matched</u>	<u>All</u>
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Euro-</u> <u>American</u>	<u>Alaska-</u> <u>Native</u>	
CSRFLI Total Score	.92	.90	.97	.90	.91	.93	.92
CSRFLI Subscale 1: Survival and Coping Beliefs	.95	.87	.93	.87	.90	.89	.89
CSRFLI Subscale 2: College and Future-Related Concerns	.78	.81	.87	.89	.80	.89	.85
CSRFLI Subscale 3: Moral Objections	.93	.90	.80	.76	.90	.76	.86
CSRFLI Subscale 4: Responsibility to Friends and Family	.88	.80	.92	.80	.82	.84	.84
CSRFLI Subscale 5: Fear of Suicide	.58	.64	.78	.58	.65	.63	.63
CSRFLI Subscale 6: Fear of Social Disapproval	.73	.45	.85	.54	.53	.66	.61
OCI Anglo Scale	.80	.86	.89	.95	.85	.94	.92
OCI American-Indian Scale	.96	.81	.85	.89	.87	.88	.96

Table 5

College Student Reasons for Living Inventory (CSRFLI) Subscale Score Intercorrelations

CSRFLI Subscale	1	2	3	4	5	6
All Matched Respondents ($n = 106$)						
CSRFLI Subscale 1: Survival and Coping Beliefs	1.00	0.68	0.43	0.43	0.04	0.40
CSRFLI Subscale 2: College and Future-Related Concerns	0.68	1.00	0.45	0.29	0.13	0.39
CSRFLI Subscale 3: Moral Objections	0.43	0.45	1.00	0.47	0.21	0.42
CSRFLI Subscale 4: Responsibility to Friends and Family	0.43	0.29	0.47	1.00	0.19	0.48
CSRFLI Subscale 5: Fear of Suicide	0.04	0.13	0.21	0.19	1.00	0.34
CSRFLI Subscale 6: Fear of Social Disapproval	0.40	0.39	0.42	0.48	0.34	1.00
All Matched Alaska Native Respondents ($n = 53$)						
CSRFLI Subscale 1: Survival and Coping Beliefs	1.00	1.00	1.00	1.00	1.00	1.00
CSRFLI Subscale 2: College and Future-Related Concerns	0.67	1.00	0.44	0.29	0.38	0.37
CSRFLI Subscale 3: Moral Objections	0.44	0.44	1.00	0.49	0.38	0.45
CSRFLI Subscale 4: Responsibility to Friends and Family	0.37	0.29	0.49	1.00	0.38	0.45
CSRFLI Subscale 5: Fear of Suicide	0.23	0.38	0.38	0.38	1.00	0.56
CSRFLI Subscale 6: Fear of Social Disapproval	0.45	0.37	0.45	0.45	0.56	1.00
All Matched Euro-American Respondents ($n = 53$)						
CSRFLI Subscale 1: Survival and Coping Beliefs	1.00	0.70	0.42	0.47	-0.17	0.32
CSRFLI Subscale 2: College and Future-Related Concerns	0.70	1.00	0.45	0.25	-0.17	0.38
CSRFLI Subscale 3: Moral Objections	0.42	0.45	1.00	0.41	0.09	0.37
CSRFLI Subscale 4: Responsibility to Friends and Family	0.47	0.25	0.41	1.00	0.00	0.49
CSRFLI Subscale 5: Fear of Suicide	-0.17	-0.17	0.09	0.00	1.00	0.07
CSRFLI Subscale 6: Fear of Social Disapproval	0.32	0.38	0.37	0.49	0.07	1.00
All Matched Alaska Native Male Respondents ($n = 10$)						
CSRFLI Subscale 1: Survival and Coping Beliefs	1.00	0.89	0.79	0.90	0.60	0.52
CSRFLI Subscale 2: College and Future-Related Concerns	0.89	1.00	0.80	0.81	0.82	0.51
CSRFLI Subscale 3: Moral Objections	0.79	0.80	1.00	0.82	0.74	0.67
CSRFLI Subscale 4: Responsibility to Friends and Family	0.90	0.81	0.82	1.00	0.61	0.62
CSRFLI Subscale 5: Fear of Suicide	0.60	0.82	0.74	0.61	1.00	0.59
CSRFLI Subscale 6: Fear of Social Disapproval	0.52	0.51	0.67	0.62	0.59	1.00
All Matched Euro-American Male Respondents ($n = 10$)						
CSRFLI Subscale 1: Survival and Coping Beliefs	1.00	0.78	0.32	0.59	-0.28	0.12
CSRFLI Subscale 2: College and Future-Related Concerns	0.78	1.00	0.47	0.50	-0.08	0.16
CSRFLI Subscale 3: Moral Objections	0.32	0.47	1.00	0.50	0.13	0.05
CSRFLI Subscale 4: Responsibility to Friends and Family	0.59	0.50	0.50	1.00	-0.37	0.53
CSRFLI Subscale 5: Fear of Suicide	-0.28	-0.08	0.13	-0.37	1.00	-0.49
CSRFLI Subscale 6: Fear of Social Disapproval	0.12	0.16	0.05	0.53	-0.49	1.00
All Matched Alaska Native Female Respondents ($n = 43$)						
CSRFLI Subscale 1: Survival and Coping Beliefs	1.00	0.60	0.34	0.12	0.11	0.42
CSRFLI Subscale 2: College and Future-Related Concerns	0.60	1.00	0.34	0.09	0.24	0.31
CSRFLI Subscale 3: Moral Objections	0.34	0.34	1.00	0.39	0.28	0.38
CSRFLI Subscale 4: Responsibility to Friends and Family	0.12	0.09	0.39	1.00	0.29	0.35
CSRFLI Subscale 5: Fear of Suicide	0.11	0.24	0.28	0.29	1.00	0.55
CSRFLI Subscale 6: Fear of Social Disapproval	0.42	0.31	0.38	0.35	0.55	1.00
All Matched Euro-American Female Respondents ($n = 43$)						
CSRFLI Subscale 1: Survival and Coping Beliefs	1.00	0.69	0.46	0.43	-0.14	0.40
CSRFLI Subscale 2: College and Future-Related Concerns	0.69	1.00	0.47	0.20	-0.15	0.43
CSRFLI Subscale 3: Moral Objections	0.46	0.47	1.00	0.38	0.06	0.49
CSRFLI Subscale 4: Responsibility to Friends and Family	0.43	0.20	0.38	1.00	0.07	0.49
CSRFLI Subscale 5: Fear of Suicide	-0.14	-0.15	0.06	0.07	1.00	0.27
CSRFLI Subscale 6: Fear of Social Disapproval	0.40	0.43	0.49	0.49	0.27	1.00

As can be seen in Table 6, intercorrelations on the Orthogonal Cultural Identity scale were also low. For Euro-Americans, the Anglo and American-Indian scale intercorrelated at $r = .15$, and for Alaska Natives, the intercorrelation was $r = .24$. Again, the two scales appear to be measuring independent, orthogonal constructs, in keeping with the theoretical model of the instrument.

Table 6

Orthogonal Cultural Identity (OCI) Scales Score Intercorrelations

	Matched Euro-American		Matched Alaska-Native	
	Anglo Scale	American-Indian Scale	Anglo Scale	American-Indian Scale
All Matched Respondents ($n = 106$)				
Anglo Scale	1.00	0.16	1.00	-0.24
American-Indian Scale	0.16	1.00	-0.24	1.00
All Male Matched Respondents ($n = 20$)				
Anglo Scale	1.00	0.30	1.00	-0.43
American-Indian Scale	0.30	1.00	-0.43	1.00
All Female Matched Respondents ($n = 86$)				
Anglo Scale	1.00	0.13	1.00	-0.20
American-Indian Scale	0.13	1.00	-0.20	1.00

Table 7 reports on differences between the Euro-American and Alaska Native group on CSRFLI total and subscale scores. Two-tailed independent group t -tests were performed on the CSRFLI full scale scores and on scores from subscales 2 (College and Future-Related Concerns), 4 (Responsibility to Family and Friends), and 6 (Fear of Social Disapproval) 6, in order to test the following hypotheses. Hypothesis 1 stated that Alaska Native students would have lower CSRFLI total scores than Euro-American students. As can be seen in Table 7, groups were significantly different. However, as can be seen on Table 2, Alaska Native students reported higher scores, or more reasons for living, than European-American students. Therefore, we reject the null hypothesis that no difference

exists between the groups. However, we fail to support the hypothesis that Alaska Native students would score lower. Instead, Alaska Native students scored higher.

Hypothesis 2a stated that Alaska Native students would score higher than Euro-American students on the Responsibility to Family and Friends subscale. As seen in Table 7, Euro-American and Alaska Native students did differ in their responses to this subscale, with Alaska Native students scoring higher than the Euro-American students, and therefore, we reject the null hypothesis. Hypothesis 2b stated that Alaska Native students would score higher than Euro-American students on the Fear of Social Disapproval subscale. Results in Table 7 show that Alaska Native students did score higher than the Euro-American students. This finding suggests a trend to support the hypothesis ($p = .053$) and reject the null hypothesis. Hypothesis 2c stated that Alaska Native students would score lower than Euro-American students on the College and Future Related Concerns. As seen in Table 7, the results failed to support this hypothesis, given that the Alaska Native students scored higher than the Euro-Americans on this subscale. Thus, we fail to reject the null hypothesis.

Table 7

Student's t-test for the Difference in College Student Reasons for Living Inventory (CSRFLI) Total and Subscale Score Group Means by Ethnicity

	American			Native			t	df	p
	M	SD	n	M	SD	n			
CSRFLI Total Score	181.68	31.17	53	195.45	34.51	53	2.16	104	0.033
CSRFLI Subscale 2: College and Future-Related Concerns	41.66	9.72	53	44.49	10.87	53	1.41	104	0.017
CSRFLI Subscale 4: Responsibility to Friends and Family	35.30	8.44	53	39.32	7.81	53	2.54	104	0.006
CSRFLI Subscale 6: Fear of Social Disapproval	15.51	4.29	53	17.02	5.17	53	1.64	104	0.053

Note: p-values given for the CSRFLI Total Score comparison are for a two-sided test of the hypothesis of no difference in group means, while the p-values for all other comparisons are for a one-sided test of the hypothesis of no difference in group means.

Hypothesis 3 stated that female students across ethnicity would have higher CSRFLI total scores than male students. As can be seen in the 2 X 2 (gender X ethnicity) ANOVA table that appears in Table 8, the main effect for gender was non-significant, and thus, we fail to reject the null hypothesis of no difference between groups on gender. Hypothesis 4 stated that male Alaska Native participants would have lower CSRFLI total scores than Euro-American men, Euro-American women, and Alaska Native women. Table 8 shows a main effect for ethnicity (Alaska Natives scored higher on the CSRFLI), but no statistically significant gender by ethnicity interaction. In sum, as can be seen on Table 2, Euro-Americans as a group scored lower than Alaska Natives on the CSRFLI, and Alaska Native men as a group scored similarly to Alaska Native women. When interpreting the results concerning hypotheses 3 and 4, it is important to do so with caution and to take the small number of male participants into consideration.

Table 8

<u>Analysis of Variance for College Student Reasons for Living Inventory (CSRFLI) Total Score</u>					
Source	<u>d.f.</u>	<u>SS</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Gender	1	340.41	340.41	0.31	0.579
Ethnicity	1	5027.36	5027.36	4.58	0.035
Gender * Ethnicity	1	212.61	212.61	0.19	0.661
Within (Error)	102	111881.66	1096.87		

Note: As shown in Table 7, there is a significant ($p=0.03$) difference in the average total CSRFLI score for Native-Americans and Euro-Americans.

Finally, correlations between the Orthogonal Cultural Identity measure scores and the CSRFLI subscale scores using the Pearson r statistic were performed. As can be seen in Table 9, for Alaska Native students, the American Indian scale had a moderate relation to CSRFLI subscale 3, moral objections, and for European American students, the Anglo scale had a moderate relation to this same CSRFLI subscale 3. This relationship was small, but stable, at the $r = .32$ and $.33$ levels.

Table 9

Correlation of College Student Reasons for Living Inventory (CSRFLI) Total and Subscale Scores with Orthogonal Cultural Identity (OCIM) Scale Scores

	Matched Euro-American		Matched Alaska-Native	
	OCI Anglo Scale	OCI American-Indian Scale	OCI Anglo Scale	OCI American-Indian Scale
All Matched Respondents (n = 106)				
CSRFLI Subscale 1: Survival and Coping Beliefs	.14	.02	.8	.04
CSRFLI Subscale 2: College and Future-Related Concerns	.20	.03	-.13	.10
CSRFLI Subscale 3: Moral Objections	.32	-.07	-.35	.33
CSRFLI Subscale 4: Responsibility to Friends and Family	.11	-.14	-.22	.03
CSRFLI Subscale 5: Fear of Suicide	-.08	-.27	-.04	.11
CSRFLI Subscale 6: Fear of Social Disapproval	.19	-.23	-.04	.14
CSRFLI Total Score	.25	-.13	-.16	.16

Discussion

This study explored reasons for living among Alaska Native and Euro-American college students to determine how the two groups potentially differ on psychological factors that are protective against suicide. While the majority of the literature suggests epidemic rates of suicide and suicidal ideation among Alaska Natives/American Indians and among college students in the United States, the major finding of this study was that Alaska Native college students had less suicidal ideation and more reasons for living than a matched Euro-American sample of college students. There are important clinical, preventative, and policy implications of this finding regarding protective factors against suicide with Alaska Natives, and the specific protective roles of academic achievement and college, as well as the associated future career and economic achievement options college may afford an individual. In addition, analyses of the CSRFLI subscales provide potential explanations for the comparatively lower suicidal ideation and higher reasons for living found among the Alaska Native college students in the current sample.

Given that the Alaska Native culture has a collectivistic orientation (Langdon, 1993), the researcher hypothesized that this group would score lower on the College and Future Related Concerns (CFRC) subscale, while scoring higher on the Responsibility to Friends and Family and Fear of Social Disapproval subscales. The hypotheses that the Alaska Natives would score higher on the latter two subscales appeared to be supported. Terry Cross (1998), in his discussion of the relational worldview found among Native American groups, described the role that one's family and community plays as central in emotional well-being for Native people. The profound sense of interdependence found in

Alaska Native families and communities is described as a source of support and strength. Thus, higher scores by Alaska Native students on the two scales which measure how important it is to refrain from attempting or committing suicide because of one's relationship with family and society is not surprising. Strong ties to both the nuclear family and extended family, along with a feeling of responsibility to family and community, are core features of the Alaska Native lifestyle and worldview (Cross, 1998). Thus, Alaska Native college students appear to feel that, if they were to commit suicide, they would be breaking that sense of interdependence they have with and the responsibility they have to family and community. Similar to other Native American groups, each individual in an Alaska Native family has a key role in that interdependence, so to lose one member creates an imbalance (Red Horse, Martinez, Day, Day, Poupart, & Sharnberg, 2000).

Although the researcher hypothesized that Alaska Native college students would score lower than Euro-American students on the CFRC subscale, they instead scored higher. Attending a college or university is commonly viewed as an individualistic goal. As mentioned before, success in college has many positive effects, such as giving individuals the sense that they are benefiting from past work, they are being a successful member of society, and that there are hopes and plans for their future (Henry, 2002). In addition, many Native students describe their goals in college as including the ability to give back to their communities, perhaps by becoming a school teacher, or through some other needed occupation. Although many Alaska Natives leave their highly collectivistic communities or are pulled away from their families to attend college, doing so does not

necessarily mean that they will experience negative effects as a result. In fact, the results of this study suggest that Alaska Native students value the positive benefits of college attendance even more so than Euro-American students. This subscale finding alone could help explain why college may be protective for Alaska Native students, through the hopeful future orientation that college and future career options afford. This finding is inconsistent with the theory that anything that weakens the social link that holds an individual to his or her family or community will serve to increase suicidal risk (Durkheim, 1951; Sullivan & Brems, 1997; Thompson & Walker, 1990; Kettl & Bixler, 1991; Napoleon, 1991). According to this theory, committing suicide is the means by which many Alaska Natives deal with their loss of culture and accompanying lack of self-identity and ascribed roles in the community. However, high scores on the CFRC scales could mean that Alaska Natives are able to maintain and strengthen their self-identity through their role as college students. In addition, the literature regarding suicidal ideation and hopelessness consistently states that those who have more hope about their future are at less risk for suicide (Milnes, Owens, & Blenkiron, 2002; Edmonson, 2002). College attendance, although considered an individualistic activity, could instill a strong hope among Alaska Native students that their future will be successful.

The results of this study also found that male students who participated in the study scored similar to female participants on reasons for living. This finding rejects the researcher's hypothesis that female students across ethnicity would have higher CSRFLI total scores, and thus less suicidal ideation, than male students. However, it supports the literature which provides strong evidence that, although the rate of suicide is significantly

higher for men in college populations, the majority of commonly used measures of suicidality are not differentially responded to by male and female college students (Langhinrichsen-Rohling, Sanders, Crane, Monson, & Candace, 1998; Wellman & Wellman, 1986). Presently, there has been very little research on gender-specific theories regarding why college males and females appear to be similar on these measures, yet college men complete suicide more often.

Finally, the finding that Alaska Native students did differ significantly from Euro-American students on total CSRFLI scores, but did not differ across gender rejects the myth that Alaska Native college students, and particularly Alaska Native male college students are at higher risk for suicide than Euro-American students.

Additional Findings

While this study suggests that Alaska Native college students are at a lesser risk of attempting or committing suicide than Euro-American students, the results also suggest another important finding. In a study done by Scheel (1999), the validity of the CSRFLI as a tool to measure reasons for living among American Indian college students provided support for its use as a valid measure with American Indians. However, until this study, there has been no research using the CSRFLI with Alaska Natives. Evidence from this study suggests that the CSRFLI is able to tap discrete constructs through its subscales with Alaska Natives as well, providing initial support for the internal validity of the CSRFLI with Alaska Natives.

Limitations of this Study

Perhaps the most critical limitation to this study is the small number of Alaska Natives generally ($n=53$), and Alaska Native males specifically, who participated ($n=10$). According to the literature, Alaska Native males are the group who are at the highest risk for attempting and/or committing suicide. Having a moderately small sample of Alaska Native males makes comparisons and generalizability difficult, but some of these concerns were addressed through the process of subject matching. The small number of Alaska Native participants in the study reflects the small number of Alaska Natives who attend the University of Alaska Fairbanks campus. In addition, although this study does suggest differences in reasons for living between Alaska Native and Euro-American students, it is important to remember that the generalizability of the findings is limited to this population only. That is, the results are not generalizable to all Alaska Natives or Euro-Americans, but rather, pertain only to those who are college students attending on-site classes. Finally, while the findings of this study suggest differences in reasons for living between Alaska Native and Euro-American college students at the University of Alaska Fairbanks, these findings are not generalizable to other campuses in Alaska or elsewhere, as college campuses differ greatly in size and number of students.

Implications

The fact that Alaska Native college students appear to be at no greater risk for suicide than Euro-American students, along with the evidence that Alaska Native students hold college and other future-related concerns as important reasons to live, has strong implications for both suicide prevention on campus and among the Alaska Native population in general. First, because Alaska Native students appear to be at no greater

risk for suicide, focus on this group as high-risk for suicide may be unfounded. However, it is important to refrain from inferring from these findings that Alaska Native students do not need any resources at all, or from inferring that some Alaska Native students, similar to some Euro-American students, are not at risk. Indeed, the University of Alaska Fairbanks presently provides a resource, Rural Student Services, which is widely used by the Alaska Native student body.

Second, the evidence shown by this study that Alaska Native students do place significant value on their responsibility to family and friends and may possess an apparent fear of social disapproval suggests that the interdependence and sense of belonging found in the Alaska Native lifestyle are particularly important as reasons for living. Sociocultural changes, as Napoleon (1991) states in his book, have been diminishing the underlying values of the Alaska Native culture. Given that the values of interdependence and responsibility appear to be important protective factors against suicide for Alaska Native college students, at least in this population, it is highly important that these values do not diminish with any future sociocultural changes.

Finally, the finding that college and future related concerns is a significant protective factor for Alaska Native college students, even more so than for Euro-American students, must not be viewed strictly as related to the students' concerns or hopes for their future, although this is important. As with any ethnic group, Alaska Natives, both those in college and those not in college, may evidence many different aspects of hope. For instance, one protective factor for Alaska Native college students may be their hopes connected to success as a college student, while simultaneously

hoping to be an effective change unit or leader, which may also serve as a protective factor that is just as significant. In addition, the hopes and concerns of those Alaska Natives not in college, to be a healthy and traditional member of the Alaska Native community, may be just as protective. These findings have important implications for further research.

Conclusion

In this study, the researcher investigated the differences in reasons for living between Alaska Native and Euro-American college students. The findings provide evidence that Alaska Native students may possess more reasons for living than a matched sample of Euro-Americans, and that their concerns for the future in college may be more of a protective factor against suicide than it is for the Euro-American students, despite their membership in a more individualistic culture. Similarly, more collectivist concerns, including responsibility to friends and family, and fear of social disapproval also appeared to function as important protective factors at enhanced levels, as compared to Euro-American college students. Finally, Alaska Native males were, as a group, at no higher risk for suicide than Alaska Native females. The implications of this research are evident, for the University of Alaska Fairbanks, in its focus on suicide prevention and for suicide prevention efforts outside of the university, as well as for further research regarding which specific college and future related concerns are important.

References

- Barrios, L. C., Everett, S. A., Simon, T. R., & Brener, N. D. (2000). Suicide ideation among US college students. *Journal of American College Health*, 48, 229-234.
- Beck, A.T., Kovacs, M., & Weissman, A. (1979). Assessment of suicidal intention: The scale for suicidal ideation. *Journal of Consulting and Clinical Psychology*, 47, 343-352
- Borowsky, I. S., Resnick, M.D., Ireland, M., & Blum, R.W. (1999). Suicide attempts among American Indian and Alaska Native youth: Risk and protective factors. *Archives of Pediatric and Adolescent Medicine*, 153, 573-580.
- Brener, N. D., Hassan, S. S., & Barrios, L. C. (1999). Suicidal ideation among college students in the United States. *Journal of Counseling and Clinical Psychology*, 67, 1004-1008.
- Clark, D. A., & Beck, A. T., & Alford, B.A. (1999). *Scientific foundations of cognitive theory & therapy of depression*. New York: John Wiley & Sons.
- Cross, T. L. (1998). Understanding family resiliency from a relational worldview. In H.I. McCubbin, E.A. Thompson, and J.E. Fromer. *Resiliency in Native American immigrant families*. Thousand Oaks, CA: Sage.
- Department of Health & Social Services, Division of Public Health, Alaska Bureau of Vital Statistics. (1996) *1996 Annual Report*. (81-121). Juneau, Alaska: Rie Munoz, Ltd.

Department of Health & Social Services, Division of Public Health, Alaska Bureau of

Vital Statistics (1998). *1998 Annual Report*. (95-110). Juneau, Alaska: Rie

Munoz, Ltd.

Dinges, N. G., & Duong-Tran, Q. (1992). Stressful life events & co-occurring depression,

substance abuse & suicidality among American Indian & Alaska Native

adolescents. *Culture, Medicine & Psychiatry*, 16, 487-502.

Durkheim, E. (1951). *Suicide: A study of sociology*. New York: The Free Press.

Edmonson, J. R. (2002). Hopelessness, self-efficacy, self-esteem, and powerlessness in

relation to American Indian suicide. *Dissertation Abstracts International: Section*

A: Humanities & Social Sciences, 63, 767-775.

Fellerath, J. P. Ph. D. University of Alaska Fairbanks Director of the Center for Health

and Counseling. Phone Interview November 12, 2001.

Furr, S. R., Westefeld, J. S., McConnel, G. N., & Jenkins, M. J. (2001). Suicide and

depression among college students: A decade later. *Professional Psychology*

Research and Practice, 32, 97-100.

Hawton, Keith. (2000). Sex and suicide. Gender differences in suicidal behaviour. *The*

British Journal of Psychiatry, 177, 484-485.

Henry, P. J. (2002). Values and political attitudes in America. *Dissertation Abstracts*

International: Section B: The Sciences & Engineering, 62, 5429-30.

Hirsch, J. K., & Ellis, J. B. (1996). Differences in life stress and reasons for living among

college suicide ideators and non-ideators. *College Student Journal*, 30, 377-386.

Hoyert, D. L., Kochanek, K. D., & Murphy, S. L. (1999). Deaths: Final data for 1997.

National Center for Health Statistics National Vital Statistics Report, 47, 99-120.

U.S. Census Bureau. 2000 Census of Population. Retrieved from

http://factfinder.census.gov/bf/_lang=en_vt_name=DEC_2000_SF1_U_DP1_geo_id=04000US02.html

Kettl, P. A., & Bixler, E. O. (1991). Suicide in Alaska Natives, 1979-1984. *Psychiatry:*

Journal for the Study of Interpersonal Processes, 54, 55-63.

Langdon, S. J. (1993). The Native people of Alaska. Anchorage, AK: Greatland Graphics

Langhinrichsen-Rohling, J., Sanders, A., Crane, M., Monson, and Candace M. (1998).

Gender and history of suicidality: Are these factors related to U.S. college students' current suicidal thoughts, feelings, and actions? *Suicide and Life-Threatening Behavior, 28* 127-142.

Linehan, M. M., Goodstein, A. J., Nielsen, S. L., & Chiles, J. A. (1983). Reasons for

staying alive when you are thinking about killing yourself: The reasons for living inventory. *Journal of Consulting and Clinical Psychology, 51, 276-286.*

May, P. A. (1987). Suicide & self-destruction among American Indian youth. *American*

Indian & Alaska Native Mental Health Research, 1, 52-69.

McIntosh, J. L. (1983). Suicide among Native Americans: Further tribal data

consideration. *Omega, 14, 215-229.*

Milnes, D., Owens, D., & Blenkiron, P. (2002). Problems reported by self-harm patients:

perception, hopelessness, and suicidal intent. *Journal of Psychosomatic Research, 53, 819-822.*

- Minino, M., A Smith, L. B. (2001). Deaths: Preliminary Data for 2000. *National Vital Statistics Reports*, 49, 35.
- Morrison, L. L., & Downey, D. L. (2000). Racial differences in self-disclosure of suicidal ideation & reasons for living: Implications for training. *Cultural Diversity & Ethnic Minority Psychology*, 6, 374-386.
- Napoleon, H. (1991). *Yuyaraq: The way of the human being*. Fairbanks, AK: College of Rural Alaska Center for Cross-Cultural Studies .
- Neyra, C. J., Range, L. M., & Goggin, W. C. (1990). Reasons for living following success and failure in suicidal and nonsuicidal college students. *Journal of Applied Social Psychology*, 20, 861-868.
- Novins, D. K., Beals, J., Roberts, R. E., & Manson, S. M. (1999). Factors associated with suicide ideation among American Indian Adolescents: Does culture matter? *Suicide & Life-Threatening Behavior*, 29, 332-346.
- Oetting, E. R. & Beauvais, F. (1990-1991). Orthogonal cultural identification theory: The cultural identification of minority adolescents. *The International Journal of the Addictions*, 25, 655-685
- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385-401
- Range, L. M., Leach, M. M., McIntyre, D., Posey-Deters, P. B., Marion, M. S., Kovac, S. H., Barrios, J. H., & Vigil, J. (1999). Multicultural perspectives on suicide. *Aggression & Violent Behaviors*, 4, 413-440.

- Red Horse, J. G., Martinez, C., Day, P., Day, D., Poupart, J., & Sharnberg, D. (2000). Family preservation concepts in American Indian communities. Seattle: Casey Family Programs. 1300 Dexter Avenue North, Seattle, WA 98109.
- Reineckie, M. A. (1997). Suicide & depression . In F. Dattilio & A. Freeman (Eds.), *Cognitive-behavioral strategies in crisis intervention* (pp. 84-125). New York: The Guilford Press.
- Rich, A. R., Kirkpatrick-Smith, J., Bonner, R., & Jans, F. (1992). Gender differences in the psychosocial correlates of suicidal ideation among adolescents. *Suicide & Life-Threatening Behavior*, 22, 364-373.
- Scheel, K. R. (1999). An exploration of the validity of the college student Reasons for living inventory with American Indian college students. *Dissertation Abstracts International: Section B: The Sciences & Engineering*, 60, 2959-2964
- Schwartz, A. J. (1980). Inaccuracy and uncertainty in estimates of college student suicide rates. *Journal of the American College Health Association* , 28, 201-204.
- Silver, B., Goldstein, S., & Silver, L. (1984). The 1990 objectives for the nation for the control of stress and violent behavior: Progress report. *Public Health Reports*, 99, 374-384.
- Spaulding, J. M. (1985-86). Recent suicide rates among ten Ojibwa Indian bands in Northwestern Ontario. *Omega*, 16, 347-354.
- Sullivan, A., & Brems, C. (1997). The psychological repercussions of the sociocultural oppression of Alaska Native peoples. *Genetic, Social, & General Psychology Monographs*, 123, 411-440.

Thompson, J. W., & Walker, R. D. (1990). Adolescent suicide among American Indians & Alaska Natives. *Psychiatric Annals*, 20, 128-133.

University of Alaska Fairbanks, Office of Planning & Institutional Research. (2001).

Fall 2000 Headcount by Ethnicity & Campus. Retrieved from

<http://www.uaf.edu/pair/factbook.html>

Wallace L. J., Calhoun A. D., Powell K. E., O'Neil J., & James, S. P. (1996).

Homicide and Suicide among Native Americans, 1979-1992. *Violence*

Surveillance Summary Series, No. 2. Atlanta, GA: Centers for Disease Control and

Prevention, National Center for Injury Prevention and Control.

Wellman, M. M., & Wellman, R. J. (1986). Sex differences in peer responsiveness to

suicide ideation. *Suicide and Life-Threatening Behavior*, 16, 360-378

Westefeld, J. S., Cardin, D., & Deaton, W. L. (1992). Development of the College

Student Reasons for Living Inventory. *Suicide and Life-Threatening Behavior*, 22,

442-452.

Westefeld, J. S., Whitcraft, K. A., & Range, L. M. (1990). College and university

student suicide: Trends and implications. *The Counseling Psychologist*, 18, 464-

476.

Appendix A: Demographics Survey

1. Gender: Male _____ Female _____

2. Age: _____

3. Class Standing: Freshman Sophomore Junior Senior

Year 1 A. A. Year 2 A. A. Other _____

4. Race:

African-American _____ Alaska Native/American Indian _____ Asian _____

Caucasian _____ Hispanic _____ Other _____

5. Marital Status: _____

6. Number of Children: _____

7. Home Community: Village ____ Urban (Fbks, Anch, Juneau, etc) ____

8. Has there been a suicide attempt in your family or by someone close to you in the past year?

Yes _____ No _____

Appendix B
Orthogonal Cultural Identification Scale

Orthogonal Cultural Identification Scale

Fred Beauvais, Ph.D.

E.R. Oetting, Ph.D.

The following questions ask how close you are to different cultures. When answering the questions about "family," think about the family that is most important to you now. How would you define that family? You can include your current family, your family of origin, or both. Answer the questions keeping that definition in mind. **You may identify with more than one culture, so please mark all responses that apply to you.**

1. Some families have special activities or traditions that take place every year at particular times (such as holiday parties, special meals, religious activities, trips or visits). How many of these special activities or traditions does your family have that are based on...

	A lot	Some	A few	None at all
White American or Anglo culture	()	()	()	()
Asian or Asian American culture	()	()	()	()
Mexican American or Spanish culture	()	()	()	()
Black or African American culture	()	()	()	()
AK Native/+American-Indian culture	()	()	()	()
Other culture	()	()	()	()

2. In the future, with your own family, will you do special things together or have special traditions, which are based on...

	A lot	Some	A few	None at all
Mexican American or Spanish culture	()	()	()	()
Asian or Asian American culture	()	()	()	()
White American or Anglo culture	()	()	()	()
Black or African American culture	()	()	()	()
AK Native/American-Indian culture	()	()	()	()
Other culture	()	()	()	()

3. Does your family live by or follow the...

	A lot	Some	Not much	None at all
AK Native/American Indian way of life	()	()	()	()
White American or Anglo way of life	()	()	()	()
Mexican American or Spanish way of life	()	()	()	()
Black or African American way of life	()	()	()	()
Asian or Asian American way of life	()	()	()	()
Other culture	()	()	()	()

4. Do you live by or follow the...

	A lot	Some	Not much	None at all
An Asian or Asian American way of life	()	()	()	()
White American or Anglo way of life	()	()	()	()
Mexican American or Spanish way of life	()	()	()	()
Black or African American way of life	()	()	()	()
AK Native/American Indian way of life	()	()	()	()
Other culture	()	()	()	()

5. Is your family a success in the...

	A lot	Some	Not much	None at all
Black or African American way of life	()	()	()	()
Mexican American or Spanish way of life	()	()	()	()
AK Native/American-Indian way of life	()	()	()	()
White American or Anglo way of life	()	()	()	()
Asian or Asian American way of life	()	()	()	()
Other culture	()	()	()	()

6. Are you a success in the...

	A lot	Some	Not much	None at all
AK Native/American Indian way of life	()	()	()	()
Asian or Asian American way of life	()	()	()	()
Mexican American or Spanish way of life	()	()	()	()
Black or African American way of life	()	()	()	()
White American or Anglo way of life	()	()	()	()
Other culture	()	()	()	()

Adapted from Oetting, E.R. & Beauvais, F. (1990-1991). Orthogonal cultural identification theory: The cultural identification of minority adolescents. *The International Journal of the Addictions*, 25, (5A & 6A), 655-685. This scale may be used, for research purpose only, without further permission from the authors.

Appendix C
College Student Reasons for Living Inventory

**COLLEGE STUDENT
REASONS FOR LIVING INVENTORY**

John S. Westefeld

Denise A. Cardin

William L. Deaton

1991

The college Student Reasons For Living Inventory may not be reproduced, stored, or transmitted without permission from the senior author, John S. Westefeld, 2608 Court Street, Iowa City, IA 52245.

Directions

We conducted a survey to learn more about the reasons why college students do not kill themselves. The statements on the following pages represent the wide range of reasons that students gave.

Many people have thought of suicide at least once. Others have never considered it.

Whether you have considered it or not, we are interested in the reasons you would have for not committing suicide **IF** the thought were to occur to you or **IF** someone were to suggest it to you.

We would like to know how important each of these statements would be to you at this time in your life as a reason for you to not kill yourself. Please rate this in the space the left on each question.

Each reason can be rated from 1 (Not At All Important) to 6 (Extremely Important). If a reason does not apply to you or if you do not believe the statement is true, then it is not likely important and you should put a 1.

Please use the whole range of choice so as not to rate only at the middle (2,3,4,5,) or only at the extremes. (1,6).

In each space, put a number to indicate the importance to you of each reason for not kill yourself.

1. Not at all Important (as a reason for not killing myself, or, does not apply to me).
2. Quite Unimportant

3. Somewhat Unimportant
4. Somewhat Important
5. Quite Important
6. Extremely Important (as a reason for not killing myself).

Even if you never have or firmly believe you never would seriously consider killing yourself, it is still important that you rate each reason. In this case, rate on the basis of why killing your self is not or would never be an alternative for you.

1. Not At All Important (as a reason for not killing myself, or , does not apply to me).
2. Quite Unimportant
3. Somewhat Unimportant
4. Somewhat Important
5. Quite Important.
6. Extremely Important (as a reason for not killing myself).

- ____ 1. Killing myself would show a lack of character
- ____ 2. I have my career to look forward to
- ____ 3. I would be afraid of what others might think
- ____ 4. I believe I have control over my life
- ____ 5. I would be hassled by my family/friend if I tried killing myself & failed
- ____ 6. I love and respect myself
- ____ 7. I want people to have good/positive memories of me after I die
- ____ 8. My family might believe I didn't love them
- ____ 9. It is against my religious beliefs to commit suicide
- ____ 10. I want to have children
- ____ 11. I'd be afraid that if I failed, I'd be left with a serious injury
- ____ 12. I believe that only God has the right to end life
- ____ 13. I want to contribute to society

- _____ 14. Others depend on me (family, children) and need me
- _____ 15. I wouldn't kill myself because of the values my parents taught me
- _____ 16. I am here for a purpose
- _____ 17. I want to see how people and the world will change in the future
- _____ 18. I have a responsibility and commitment to my family
- _____ 19. I'm a coward and would not have the guts to do it
- _____ 20. I have confidence in my ability to deal with problems
- _____ 21. I've worked too hard to throw it all away now
- _____ 22. I would not want to disappoint my family
- _____ 23. I am looking forward to the future
1. Not at all Important (as a reason for not killing myself, or, does not apply to me).
 2. Quite Unimportant
 3. Somewhat Unimportant
 4. Somewhat Important
 5. Quite Important
 6. Extremely Important (as a reason for not killing myself).
- _____ 24. I consider it morally wrong
- _____ 25. I am too stable to kill myself
- _____ 26. I am too young to die
- _____ 27. It would cause a lot of guilt and pain for my friends
- _____ 28. I want to put my college degree to good use
- _____ 29. I believe I can cope with my problems
- _____ 30. I just think that things would never get bad enough to kill myself
- _____ 31. I could not decide where, when, or how to do it
- _____ 32. I would miss my family
- _____ 33. I want to live to see what potential I have
- _____ 34. Killing myself would be a murder
- _____ 35. I would embarrass my college/university

- _____ 36. Killing myself would show that I'm a failure & can't cope with
everyday life
- _____ 37. I would miss my friends
- _____ 38. It would cause a lot of guilt and pain for my family
- _____ 39. I'm scared of the pain that I would experience
- _____ 40. I want to graduate from college
- _____ 41. I enjoy life
- _____ 42. I am happy
- _____ 43. I'd be afraid of trying it and failing
- _____ 44. I have a lot of positive things going for me
- _____ 45. College will enhance my future
- _____ 46. I want to succeed

Appendix D

UAF Institutional Review Board Consent Form

You are being asked to read the following material to make sure that you are informed about this research study and how you will participate in it, if you consent to do so. Signing this form will indicate that you have been informed and that you give your consent. Federal regulations require written informed consent before you participate in this study so that you can know the nature and risks of your participation and can decide to participate or not participate.

Purpose:

Alaska has one of the highest rates of suicide in the nation. You are invited to participate in a study designed to help examine the differences people have in their reasons for choosing not to kill themselves. Different cultural groups have various reasons as to why they would choose not to commit suicide and I will be looking at how these reasons differ between Alaska Natives and Non-Natives. I want to learn about this difference among cultural groups, so that there is an awareness of which protective factors are important and should be fostered more in suicide prevention programs.

Procedure:

I will ask you to fill out three different surveys. The first will be a demographics survey which will ask you to identify your age, sex, marital status, family income, recent family history of suicide, and ethnicity. The second survey is the Orthogonal Identity Scale which is a six-item scale which measures how an individual culturally identifies himself/herself. The third survey is the College Students Reasons for Living Inventory and has 46 statements. You will be asked to rate each statement in terms of how important that reason would be as a reason not to kill yourself if you were to think about committing suicide. Filling out all three surveys will take no longer than 20 minutes. At no time will data from an individual be presented. Findings from this study will be archived at the University of Alaska Fairbanks Rasmuson Library for five years.

Voluntary Participation

You must be 18 years or older to participate in this study. Participation in this study is completely voluntary. You do not have to take part in this study if you do not want to. There will not be a penalty if you choose not to participate. You may withdraw from the study at any time with no penalty.

Risks or Discomforts:

I see minimal risks for most participants. However, some of the questions may bring back painful memories for anyone who has a close experience with suicide involving either yourself or someone you know. Although this study examines suicide from a strengths-based perspective, the language of many of the questions in the surveys does directly focus on suicide and reasons for not killing yourself. You may withdraw from the study

at any time with no penalty. If you experience painful emotions as the result of your participation in this study and feel you need to talk about them, there is a referral source attached to this form with contact information for several agencies who can help you.

Benefits:

I hope that there will be many benefits of this research. The most important is to learn about the different protective factors groups of people have in regard to suicide. I hope to learn about things that may prevent or lessen the risk of suicide. Your participation will improve the awareness of what should be a major part of suicide prevention's focus.

Confidentiality:

Your answers are confidential. Your name on the consent form will be kept separate from answers. We will not tell anyone who took part in these interviews. Answers and consent forms will be kept separate and locked up in a locked research room. The only people who will have access to this room will be UAF Department of Psychology research staff, graduate students conducting IRB approved research, a research assistant, and the researcher.

Contacts:

Teisha Simmons is conducting this study for her thesis research and Dr, James Allen is the research supervisor. If you have any questions at any time regarding this project's activities, you may email Teisha Simmons at ftms1@uaf.edu or call Dr. James Allen at 907-474-6132 or email him at Jim.Allen@uaf.edu. If you have questions regarding your rights as a research participant, please contact Karin Davidson, Research Committee Coordinator, Office of Research Integrity at 907-474-7800 k.davidson@uaf.edu.

Authorization

Signing this form below means the methods, inconveniences, risks, and benefits have been explained to you, any questions have been answered, and we may begin the survey. Signing this form also verifies that you are 18 years or older. Your participation in this research is voluntary. You may ask questions at any time. You are free to withdraw from the survey at any time without penalty. You are free to not answer any question you do not want to answer. A copy of this signed consent form will be given to you.

Participant's Signature

Date

Appendix E

Referral Form

If you experience unpleasant memories or emotions regarding your own or others' experience with suicidal thoughts, feelings, or behaviors, the agencies and organizations listed below have resources available to work with you. Please do not hesitate to contact any of them.

1. University of Alaska Fairbanks Center for Health & Counseling
2nd Floor - Health Safety and Security Building (across from Wood Center)
(907) 474-7043
fyheaco@uaf.edu
2. Careline Crisis Hotline
(907) 452-4357
1-800-898-5463
3. Fairbanks Memorial Hospital Emergency Room
1650 Cowles St.
(907) 451-6682
4. Fairbanks Community Mental Health Center
122 1st Ave. 4th Floor
(907) 452-1575
5. Fairbanks Counseling & Adoption
912 Barnette St.
(907) 456-4729
6. Chief Andrew Isaac Health Center
1408 19th Avenue
(907) 451-6682